Supplementary Material

Plasmalemma localisation of DOUBLE HYBRID PROLINE-RICH PROTEIN 1 and its function in systemic acquired resistance of *Arabidopsis thaliana*

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Fig. S1. Construction of OE, RNAi and GFP fusion expression vectors of AtDHyPRP1. (A) Structure of RNAi construct, the vector is pRI101-AN. (B) Structure of overexpression, the vector is pRI101-AN. (C) Structure of AtDHyPRP1-GFP fusion expression, the vector is pCAMBIA1302.
**Fig. S2.** Identification and expression analysis of *AtDHyPRP1* OE and RNAi lines. (A) PCR identification of *AtDHyPRP1* OE lines. M, DL2000 DNA Ladder; WT, wild-type Ws plant; OE1-OE4, *AtDHyPRP1* overexpressing lines. (B) PCR identification of *AtDHyPRP1* RNAi lines. M, DL2000 DNA Ladder; WT, wild-type Ws plant; RNAi1-RNAi6, *AtDHyPRP1* RNAi lines. (C) RT-PCR analysis of *AtDHyPRP1* in lines with modulated expression of *AtDHyPRP1*. OE1, *AtDHyPRP1* overexpressing line 1; WT, wild-type Ws plant; RNAi1, *AtDHyPRP1* RNAi line 1.
**Fig. S3.** RT-PCR analyses of *AtLTP1* and *DIR1* in RNAi lines of *AtDHyPRP1*. M, DL2000 DNA Ladder; WT, wild-type Ws plant; RNAi1-RNAi6, *AtDHyPRP1* RNAi lines.
Fig. S4. Identification of 35S::AtDHyPRP1-GFP transgenic Arabidopsis plants. (A) PCR analysis of AtDHyPRP1-GFP fusion gene. M, DL2000 DNA Ladder; WT, wild-type Ws plant; AtDHyPRP1-GFP1 – AtDHyPRP1-GFP3, 35S::AtDHyPRP1-GFP transgenic Arabidopsis plants. (B) Western blotting analysis of the integrity of AtDHyPRP1-GFP fusion protein using GFP-specific antibody. AtDHyPRP1-GFP1, 35S::AtDHyPRP1-GFP transgenic Arabidopsis line 1; WT, wild-type Ws plant. The arrow indicates the AtDHyPRP1-GFP fusion protein. At bottom is an identically loaded gel stained with Coomassie blue.
**Fig. S5.** RT-PCR analyses showing the influence of infection with avirulent *Pst avrRPM1* (A) and virulent *Pst* DC3000 (B) on expression of *AtDHyPRP1* at different time points after inoculation.
Fig. S6. Response of WT, \textit{AtDHyPRP1} OE and \textit{AtDHyPRP1} RNAi plants to \textit{B. cinerea}. WT, wild-type Ws plant; OE1, \textit{AtDHyPRP1} overexpressing line 1; RNAi1, \textit{AtDHyPRP1} RNAi line 1. 10 μL conidial suspension with a concentration of 1×10^5 conidia.mL^{-1} was pipetted onto the surface of detached rosette leaves of 3-week-old Arabidopsis plants and the leaves were checked after 4 days.
Fig. S7. Response of 3-week-old WT, *AtDHyPRP1* OE and RNAi lines to *Pst* DC3000. Four days after spraying with bacterial suspension of *Pst* DC3000 with $OD_{600}=0.01$. RNAi1, *AtDHyPRP1* RNAi line 1; WT, wild-type Ws plant; OE1, *AtDHyPRP1* overexpressing line 1.